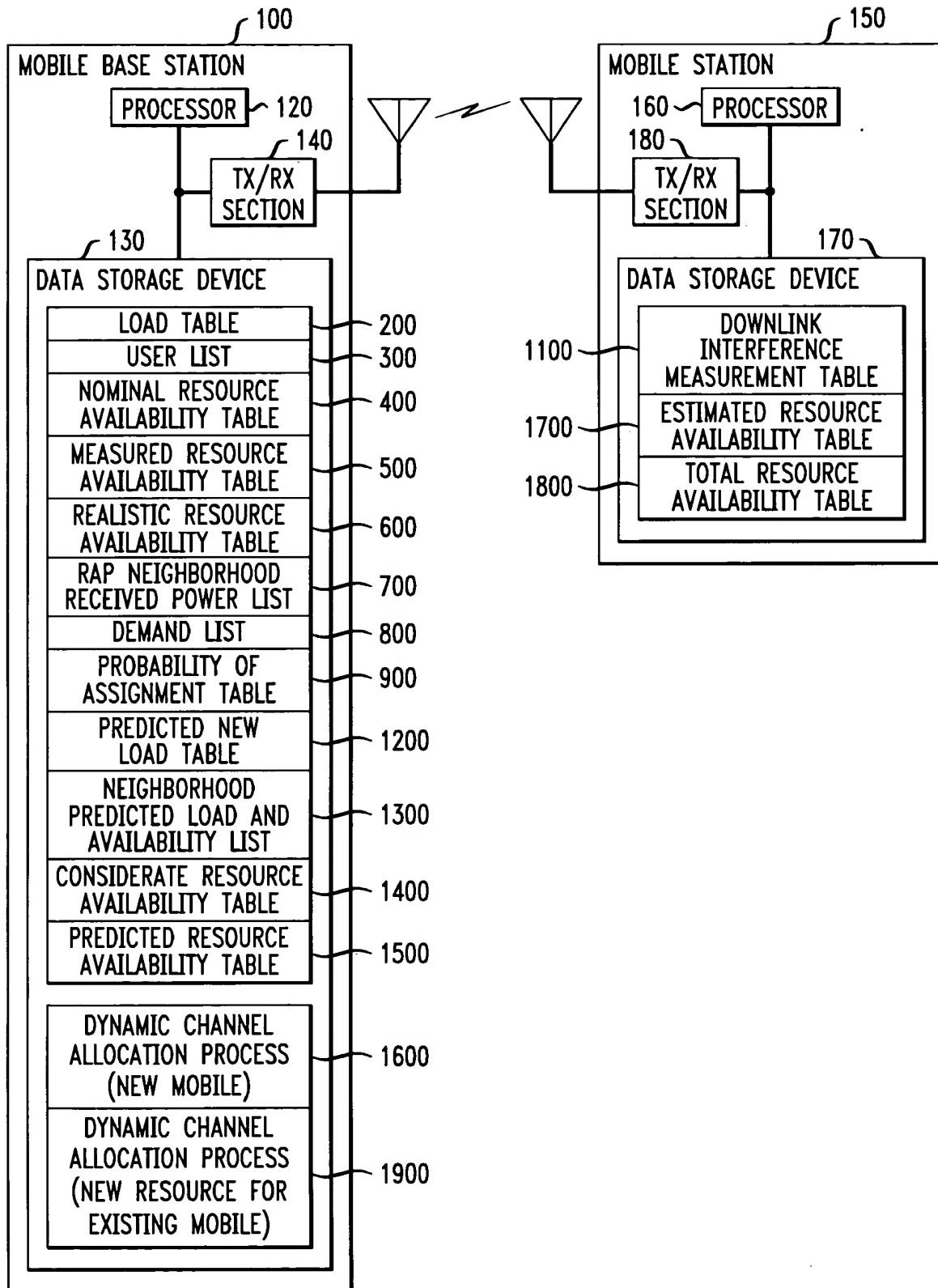


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FIG. 1



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FIG. 2

200

ACTUAL LOAD TABLE FOR $R_i$			
DOWNLINK		UPLINK	
BAND	LOAD	BAND	LOAD
$B_1^D$	$M_{1,i}^D$	$B_1^U$	$M_{1,i}^U$
$B_2^D$	$M_{2,i}^D$	$B_2^U$	$M_{2,i}^U$
$\vdots$	$\vdots$	$\vdots$	$\vdots$
$B_L^D$	$M_{L,i}^D$	$B_L^U$	$M_{L,i}^U$

FIG. 3

300

ACTUAL USER LIST FOR $R_i$								
MOBILE ID	DOWNLINK				UPLINK			
	$B_1^D$	$B_2^D$	...	$B_L^D$	$B_1^U$	$B_2^U$	...	$B_L^U$
$M_1$	$C_{1,1}^{i,D}$	$C_{1,2}^{i,D}$	...	$C_{1,L}^{i,D}$	$C_{1,1}^{i,U}$	$C_{1,2}^{i,U}$	...	$C_{1,L}^{i,U}$
$M_2$	$C_{2,1}^{i,D}$	$C_{2,2}^{i,D}$	...	$C_{2,L}^{i,D}$	$C_{2,1}^{i,U}$	$C_{2,2}^{i,U}$	...	$C_{2,L}^{i,U}$
$\vdots$			...				...	
$M_K$	$C_{K,1}^{i,D}$	$C_{K,2}^{i,D}$	...	$C_{K,L}^{i,D}$	$C_{K,1}^{i,U}$	$C_{K,2}^{i,U}$	...	$C_{K,L}^{i,U}$

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FIG. 4

NOMINAL RESOURCE AVAILABILITY TABLE 400 FOR $R_i$			
DOWNLINK		UPLINK	
BAND	AVAIL.	BAND	AVAIL.
$B_1^D$	$a_{1,i}^{D,nom}$	$B_1^U$	$a_{1,i}^{U,nom}$
$B_2^D$	$a_{2,i}^{D,nom}$	$B_2^U$	$a_{2,i}^{U,nom}$
$\vdots$	$\vdots$	$\vdots$	$\vdots$
$B_L^D$	$a_{L,i}^{D,nom}$	$B_L^U$	$a_{L,i}^{U,nom}$

FIG. 5

MEASURED RESOURCE AVAILABILITY TABLE 500 FOR $R_i$			
DOWNLINK		UPLINK	
BAND	AVAIL.	BAND	AVAIL.
$B_1^D$	$a_{1,i}^{D,mrd}$	$B_1^U$	$a_{1,i}^{U,mrd}$
$B_2^D$	$a_{2,i}^{D,mrd}$	$B_2^U$	$a_{2,i}^{U,mrd}$
$\vdots$	$\vdots$	$\vdots$	$\vdots$
$B_L^D$	$a_{L,i}^{D,mrd}$	$B_L^U$	$a_{L,i}^{U,mrd}$

FIG. 6

REALISTIC RESOURCE AVAILABILITY TABLE 600 FOR $R_i$			
DOWNLINK		UPLINK	
BAND	AVAIL.	BAND	AVAIL.
$B_1^D$	$a_{1,i}^{D,real}$	$B_1^U$	$a_{1,i}^{U,real}$
$B_2^D$	$a_{2,i}^{D,real}$	$B_2^U$	$a_{2,i}^{U,real}$
$\vdots$	$\vdots$	$\vdots$	$\vdots$
$B_L^D$	$a_{L,i}^{D,real}$	$B_L^U$	$a_{L,i}^{U,real}$

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FIG. 7

RAP NEIGHBORHOOD RECEIVED POWER LIST 700 FOR $R_i$	
RAP ID	RECEIVED POWER LEVEL
$R_{i1}$	$P_{i \leftarrow 1}$
$R_{i2}$	$P_{i \leftarrow 2}$
$\vdots$	$\vdots$
$R_{iJ}$	$P_{i \leftarrow J}$

FIG. 8

DEMAND LIST 800 FOR $R_1$		
MOBILE ID	# OF REQUESTED RESOURCES	LOCATION IN QUEUE
$M_1$	$\lambda_1^D, \lambda_1^U$	$x_1$
$M_2$	$\lambda_2^D, \lambda_2^U$	$x_2$
$\vdots$	$\vdots$	$\vdots$
$M_K$	$\lambda_K^D, \lambda_K^U$	$x_K$

FIG. 9

PROBABILITY OF ASSIGNMENT TABLE 900 FOR $R_i$			
DOWNLINK		UPLINK	
BAND	AVAIL.	BAND	AVAIL.
$B_1^D$	$p_{1,i}^D$	$B_1^U$	$p_{1,i}^U$
$B_2^D$	$p_{2,i}^D$	$B_2^U$	$p_{2,i}^U$
$\vdots$	$\vdots$	$\vdots$	$\vdots$
$B_L^D$	$p_{L,i}^D$	$B_L^U$	$p_{L,i}^U$

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FIG. 10

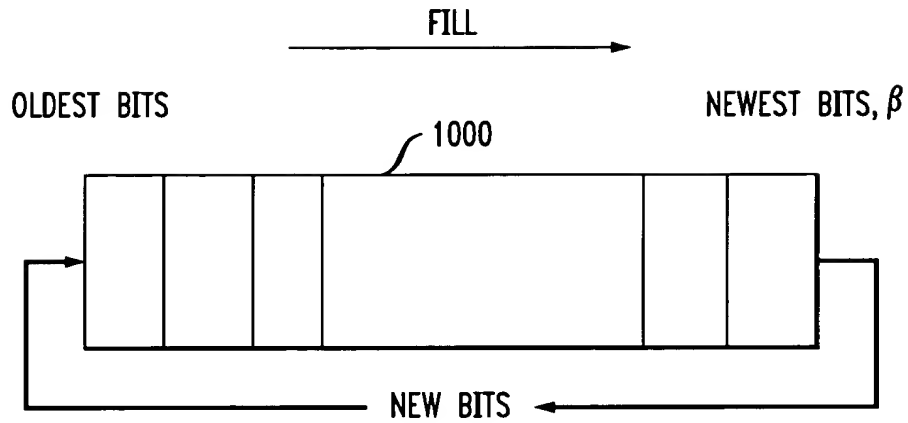


FIG. 11

MOBILE DOWNLINK INTERFERENCE MEASUREMENT TABLE 1100	
BAND	MEASURED INTERFERENCE LEVEL
$B_1^D$	$I_{1,k}^D$
$B_2^D$	$I_{2,k}^D$
$\vdots$	$\vdots$
$B_L^D$	$I_{L,k}^D$

FIG. 12

PREDICTED NEW LOAD TABLE 1200 FOR $R_i$			
DOWNLINK		UPLINK	
BAND	PREDICTED LOAD	BAND	PREDICTED LOAD
$B_1^D$	$\mu_{1,i}^D$	$B_1^U$	$\mu_{1,i}^U$
$B_2^D$	$\mu_{2,i}^D$	$B_2^U$	$\mu_{2,i}^U$
$\vdots$	$\vdots$	$\vdots$	$\vdots$
$B_L^D$	$\mu_{L,i}^D$	$B_L^U$	$\mu_{L,i}^U$

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FIG. 13

RAP NEIGHBORHOOD PREDICTED LOAD AND AVAILABILITY LIST 1300 FOR $R_i$		
RAP ID	PREDICTED LOAD	REAL AVAILABILITY
$R_{i1}$	$\mu_{l,i1}^D, \mu_{l,i1}^U \forall l$	$\alpha_{l,i1}^{D,real}, \alpha_{l,i1}^{U,real} \forall l$
$R_{i2}$	$\mu_{l,i2}^D, \mu_{l,i2}^U \forall l$	$\alpha_{l,i2}^{D,real}, \alpha_{l,i2}^{U,real} \forall l$
$\vdots$	$\vdots$	$\vdots$
$R_{iJ}$	$\mu_{l,iJ}^D, \mu_{l,iJ}^U \forall l$	$\alpha_{l,iJ}^{D,real}, \alpha_{l,iJ}^{U,real} \forall l$

FIG. 14

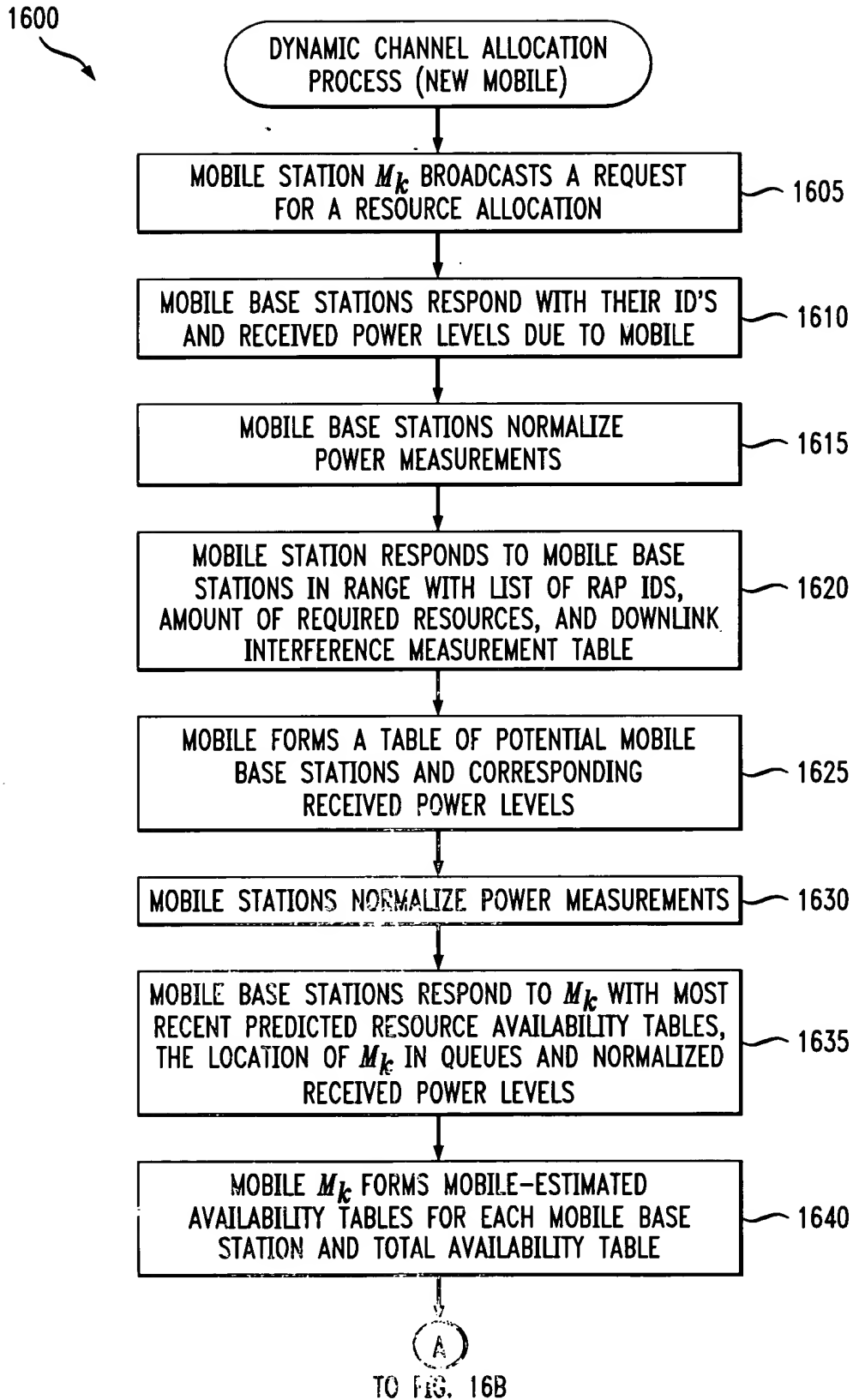
CONSIDERATE RESOURCE AVAILABILITY TABLE 1400 FOR $R_i$			
DOWNLINK		UPLINK	
BAND	AVAIL.	BAND	AVAIL.
$B_1^D$	$\alpha_{1,i}^{D,con}$	$B_1^U$	$\alpha_{1,i}^{U,con}$
$B_2^D$	$\alpha_{2,i}^{D,con}$	$B_2^U$	$\alpha_{2,i}^{U,con}$
$\vdots$	$\vdots$	$\vdots$	$\vdots$
$B_L^D$	$\alpha_{L,i}^{D,con}$	$B_L^U$	$\alpha_{L,i}^{U,con}$

FIG. 15

PREDICTED RESOURCE AVAILABILITY TABLE 1500 FOR $R_i$			
DOWNLINK		UPLINK	
BAND	AVAIL.	BAND	AVAIL.
$B_1^D$	$\alpha_{1,i}^{D,pred}$	$B_1^U$	$\alpha_{1,i}^{U,pred}$
$B_2^D$	$\alpha_{2,i}^{D,pred}$	$B_2^U$	$\alpha_{2,i}^{U,pred}$
$\vdots$	$\vdots$	$\vdots$	$\vdots$
$B_L^D$	$\alpha_{L,i}^{D,pred}$	$B_L^U$	$\alpha_{L,i}^{U,pred}$

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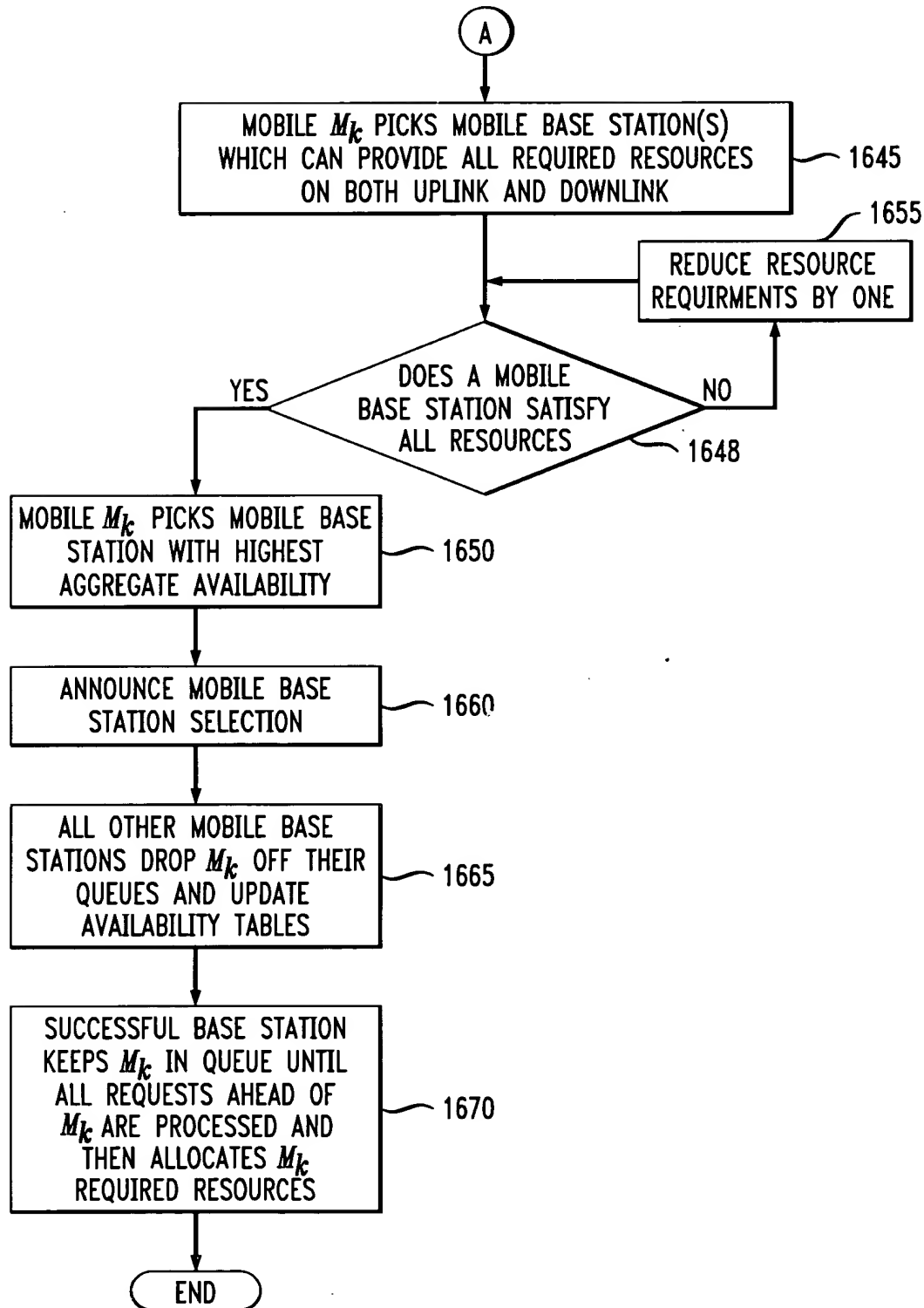
FIG. 16A



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FIG. 16B

FROM FIG. 16A





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FIG. 17

MOBILE-ESTIMATED RESOURCE AVAILABILITY TABLE 1700 FOR $R_i$ FOR $M_k$			
DOWNLINK		UPLINK	
BAND	AVAIL.	BAND	AVAIL.
$B_1^D$	$a_{1,i}^{D,MobEst}$	$B_1^U$	$a_{1,i}^{U,MobEst}$
$B_2^D$	$a_{2,i}^{D,MobEst}$	$B_2^U$	$a_{2,i}^{U,MobEst}$
$\vdots$	$\vdots$	$\vdots$	$\vdots$
$B_L^D$	$a_{L,i}^{D,MobEst}$	$B_L^U$	$a_{L,i}^{U,MobEst}$

FIG. 18

MOBILE TOTAL RESOURCE AVAILABILITY TABLE 1800 FOR $M_k$			
DOWNLINK		UPLINK	
RAP	AVAIL.	RAP	AVAIL.
$R_1$	$a_i^{D,total}$	$R_1$	$a_i^{U,total}$
$R_2$	$a_i^{D,total}$	$R_2$	$a_i^{U,total}$
$\vdots$	$\vdots$	$\vdots$	$\vdots$
$R_N$	$a_i^{D,total}$	$R_N$	$a_i^{U,total}$

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FIG. 19

1900

